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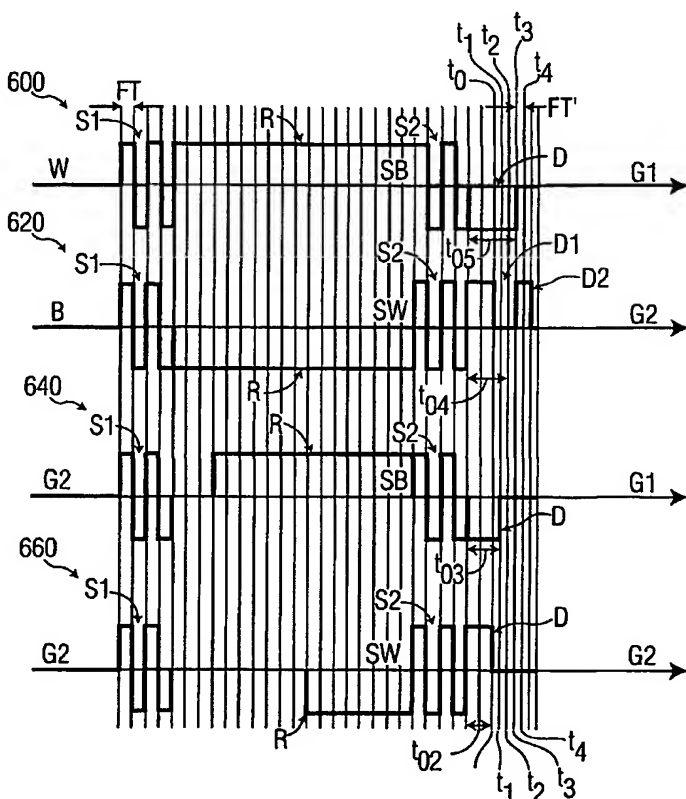
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[Continued on next page]

(54) Title: **DRIVING METHOD FOR AN ELECTROPHORETIC DISPLAY WITH HIGH FRAME RATE AND LOW PEAK POWER CONSUMPTION**



(57) Abstract: An image is updated on a bi-stable display (310) such as an electrophoretic display by using voltage waveforms (600, 620, 640, 660; 700, 720, 740, 760; 800, 820, 840, 860) that are configured such that voltage changes are constrained to a subset of possible voltage levels during specific frame times. The specific frame times may occur during data-dependent portions of the waveforms, such as a reset portion (R) and/or a drive portion (D, D1, D2). Due to the reduced voltage swing, the supply voltage can be reduced, resulting in reduced power consumption. Moreover, the frame time (FT') can be shortened during the data-dependent portions of the waveforms to increase the greyscale accuracy and number of grey levels. At other frames times, the voltage levels can vary throughout the full range of possible voltage levels, while a standard frame time (FT) is used.

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